Model # AC-G0002
3500 Surge Watts / 3000 Running Watts
PORTABLE GENERATOR
INSTRUCTION MANUAL

Thank you for purchasing this high quality ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator. This manual provides important information on properly operating and maintaining this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator. Every effort has been made to ensure the accuracy of this manual. We reserve the right to change this product at any time without prior notice.

This manual contains important information regarding safety, operation, maintenance and storage of this product. Before use, read carefully and understand all warnings, cautions, instructions and labels. Failure to do so could result in serious personal injury, property damage or even death.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

STOP!

DO NOT RETURN THIS GENERATOR TO THE RETAILER.

Questions? Problems? CONTACT BUFFALO TOOLS.
If you experience a problem or need to return this generator for repair, please fill out a RGA form by visiting our web site, http://www.buffalotools.com Or, call our customer help line at 1-866-460-9436, Monday-Friday, 8 AM - 4 PM Central Time. A copy of the sales receipt is required.

ACDelco c/o
New Buffalo Corporation
1220 North Price Road
St. Louis MO 63132
Phone: 866-460-9436
www.buffalotools.com

ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator

FEATURES:

- 3500 Surge Output
- 3000 Running Watts
- 120/240 Volt Operation
- 6.5 HP Engine, 4 Stroke OHV
- Air Cooled
- 4 Gal. Fuel Tank w/Gauge
- AVR Automatic Voltage Regulation
- Recoil Start
- Low Oil Shut Off
- Spark Arrestor
- UL Listed Electrical Components
- MTL Approved
- Full Power Panel
- Engine Shut Off Switch
- 120/240V Dual Voltmeter
- Circuit Breaker & Power Outlets
- 1-12V DC Outlet
- 2-120V GFCI Outlets
- 1-120/240V Outlet

- Complies with CARB and EPA emissions, and MTL standards

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RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

What You Need to Know About Safety Instructions

Warning and Important Safety Instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when operating or cleaning tools and equipment.

Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Notice Regarding Emissions:
Engines certified to comply with California and U.S. EPA emission regulations for SORE (Small Off Road Equipment) are certified to operate on regular unleaded gasoline and may include the following emission control systems: Three-Way Catalyst (TWC) (if equipped), and Engine Modifications (EM).

Legal Requirements:
Federal and/or State Occupational Safety and Health Administration (OSHA) regulations, local codes, and/or ordinances may apply to the intended use of this generator. Consult a qualified electrician, electrical inspector, and/or the local agency having jurisdiction. Some areas require generators to be registered with local utility companies. Additional regulations may apply if this generator will be used at a construction site.

IMPORTANT SAFETY INSTRUCTIONS

STOP!

Before using this generator and if you have any questions regarding the hazard and safety notices listed in this manual and/or on this generator, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

⚠ DANGER

Carbon Monoxide Gas: When in operation, the exhaust from this generator contains poisonous carbon monoxide gas. Carbon monoxide gas is both odorless and colorless AND may be present even if you do not see or smell gas. Breathing this poison gas can lead to headaches, dizziness, drowsiness, loss of consciousness and eventually death.
• Use this generator ONLY outdoors in non-confined areas.
• Keep at least several feet of clearance on all sides to allow proper ventilation for this generator.

⚠ WARNING

Chemicals: According to the State of California, the exhaust from this generator contains chemicals known to cause cancer, birth defects, or other reproductive harm.

⚠ WARNING

Flammable Gasoline: This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death. A nearby open flame can lead to an explosion even if not directly in contact with gasoline.
• Do not operate this generator near open flame.
• Do not smoke near this generator.
• Always operate this generator on a firm, level surface.
Gasoline is highly flammable and explosive. Handling fuel can result in serious injury or burns.
• Always shut down this generator before refueling. Refuel in a well-ventilated area. Keep heat, sparks and flame away while refueling and away from the location where gasoline is stored. Never refuel indoors where gasoline fumes may reach flames and/or sparks.
• Allow this generator to cool for at least 2 minutes before removing the fuel tank cap. Loosen the cap slowly to relieve pressure in the fuel tank. Avoid spilling fuel.
• Do not fill the fuel tank above the upper limit line. Gasoline may expand during operation. Do not fill to the top of the tank.
• Always check for spilled gasoline and immediately wipe it up before starting this generator.
• Empty the fuel tank before storing or transporting this generator.
• Always handle fuel outdoors.
• Before transporting, turn the fuel valve to the "off" position and disconnect the spark plug.

⚠ DANGER

Powerful Voltage: This generator produces powerful voltage, which can result in electrocution.

• ALWAYS ground this generator before using it. (See "Ground the Generator" section in this manual).
• Only electrical devices should be plugged into this generator, either directly or with an extension cord. NEVER connect a building electrical system to this generator without a qualified electrician. Such connections must isolate generator power from utility power and comply with local electrical laws and codes. Failure to comply can create a back feed into utility lines creating an electrocution hazard, which may result in serious injury or death to utility workers. Such a back feed may cause this generator to explode, burn and create fires when utility power is restored.
• Use a ground fault circuit interrupter (GFCI) in highly conductive areas such as metal decking or steel work. GFCIs are available in-line with some extension cords.
• Do not use this generator in wet conditions (rain, snow, active sprinkler system, wet hands, etc.). Always keep this generator dry and operate it with dry hands.
• Do not touch bare wires or outlets (receptacles).
• Do not allow children or non-qualified persons to operate this generator.

⚠ DANGER

High Temperatures: This generator produces heat when in operation. Temperatures near the exhaust can exceed 150 Degrees Fahrenheit (65 Degrees Celsius).

• Do not touch hot surfaces. Observe all warning placards on this generator denoting hot surfaces.
• Allow this generator to cool for several minutes after use before touching the engine, muffler or other areas that are hot during operation and before storing indoors.
• Hot exhaust may ignite some materials. Keep flammable materials away from this generator.
• Keep at least several feet of clearance on all sides of this generator during operation. Do not enclose this generator in any structure.

⚠ CAUTION

Usage: Misuse of this generator can damage it or shorten its life.

• Use this generator only for its intended purpose.
• Operate this generator only on a dry, level surface.
• Allow this generator to run for several minutes before connecting any electrical devices.
• Promptly turn off any malfunctioning devices and disconnect them.
• Do not operate an excessive number of electrical devices in excess of the wattage capacity of this generator.
• Do not turn on electrical devices until *after* they are connected to this generator.
• Turn off all connected electrical devices before stopping this generator.

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

⚠ DANGER

EXHAUST CONTAINS POISONOUS CARBON MONOXIDE GAS THAT CAN BUILD UP TO DANGEROUS LEVELS IN CLOSED AREAS. BREATHING CARBON MONOXIDE CAN CAUSE UNCONSCIOUSNESS OR DEATH. Never run the generator in a closed or even partly closed area where people may be present.

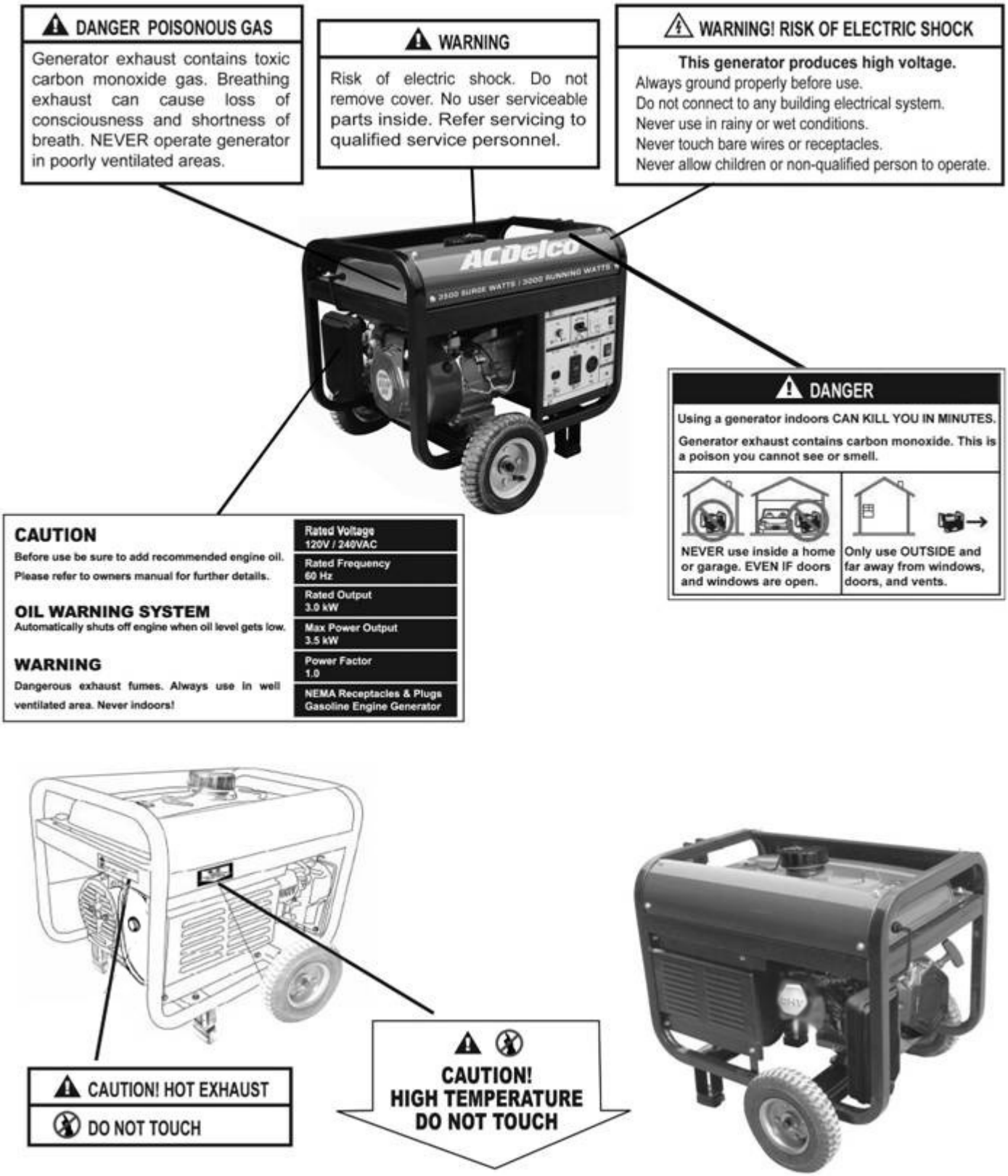
⚠ WARNING

GASOLINE IS HIGHLY FLAMMABLE AND EXPLOSIVE. YOU COULD BE BURNED OR SERIOUSLY INJURED IF THE GASOLINE IS IGNITED. Before refueling, stop the engine and keep heat, sparks and flame away. Handle fuel only outdoors. Do not fill the fuel tank above the upper limit line. Wipe up spills immediately.

⚠ WARNING

IMPROPER CONNECTIONS TO A BUILDING CAN ALLOW ELECTRICAL CURRENT TO BACKFEED INTO UTILITY LINES, CREATING AN ELECTROCUTION HAZARD. Connections to a building must isolate generator power from utility power and comply with all applicable laws and electrical codes.

In addition to the previously described safety information, familiarize yourself with all safety and hazard placards on this generator.



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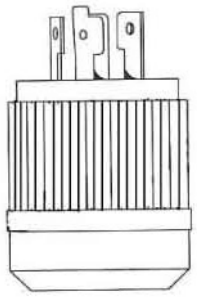
PACKAGE CONTENTS

The following items are supplied with this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator. Verify that all items are included.

STOP!

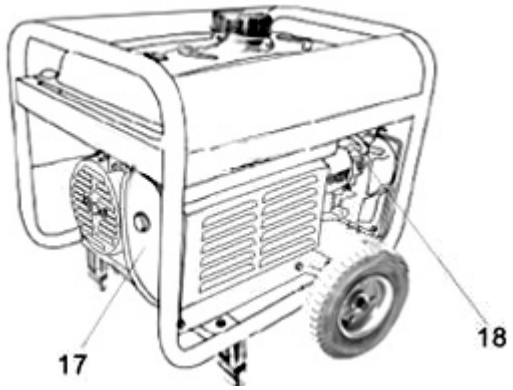
If there are missing items, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time for customer service. DO NOT RETURN THIS GENERATOR TO THE RETAILER.

Item List:	
	NEMA L14-30 plug for connecting 240 Volt electrical devices
	Set of 2 DC connector wires for connecting 12 Volt automotive-type batteries
	Spark plug wrench

GENERATOR COMPONENTS

Observe the locations and functions of the various components and controls of this generator.

(1) 120/240 Volt AC Outlet - Used for connecting electrical devices that run on 120 and/or 240 Volt, 60 Hz, single phase, AC current.
(2) Ground Terminal - Used for connecting grounding wires to properly ground this generator.
(3) 120 Volt AC Outlet - Used for connecting electrical devices that run on 120 Volt, 60 Hz, single phase, AC current.
(4) Voltage Selector - Used to select between 120 or 240 Volt output.
(5) Circuit Breaker- Reset switch that protects this generator from electrical overload.
(6) 12 Volt DC Outlet - Only used for charging 12 Volt automotive-type batteries.
(7) Oil Filler/Dipstick Cap - Location for checking and filling the engine crankcase oil.
(8) Engine Switch - Used for starting/stopping the engine.
(9) Recoil Starter - Pull-cord for starting the engine.
(10) Fuel Filter Cup - Traps dirt and water from the fuel prior to entering the engine.
(11) Fuel Valve - Allows gasoline to pass into the engine.
(12) Air Filter - A removable, cleanable, sponge-like element that limits the amount of dirt pulled into the engine.
(13) Choke Lever - Adjusts the amount of air allowed into the engine.
(14) Fuel Gauge - Indicates the amount of gasoline remaining in the fuel tank.
(15) Fuel Tank Cap - Access to the fuel tank for adding gasoline.
(16) Volt Meter - A gauge indicating the voltage output.



(17) Muffler - Reduces the engine noise level.
(18) Spark Plug - Provides ignition to the engine.

PREPARING THE GENERATOR FOR USE

Using this Generator for the First-Time

STOP! **CAUTION**

The following section describes the required steps for preparing this generator for the first use. Failure to correctly perform these steps can damage this generator and/or shorten its life. If still unsure about how to perform any of these steps after reading this section, call 1-866-460-9436 Monday - Friday, 8 AM - 4 PM Central Time for customer service.

If this generator is being used for the first time, the following few steps are required to prepare it for operation:

Step 1 - Add Oil

This generator requires engine oil to function. Engine oil is a major factor affecting engine performance and service life. When new from the package, this generator contains no oil in the engine crankcase. The correct quantity of oil is equal to the oil capacity of the engine crankcase and is 20 fluid oz (0.6 L) for this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator. Add the correct quantity of oil before operating this generator for the first time. When replenishing oil for subsequent use of this generator, always determine that this generator has the correct quantity of oil.

Model AC-G0002 Oil Capacity (fluid oz./L)	20 / 0.6
Model AC-G0002 Oil Type Recommended	SAE-30

To add oil:

1. Confirm that this generator is on a level surface.

2. Unscrew the oil filler/dipstick cap from the engine as illustrated in Figure 1.

3. Using a funnel, add high detergent motor oil to fill the engine crankcase to the correct quantity as stated above. SAE-30 oil is recommended for general, all-temperature use. When the engine crankcase is full, the oil level should reach the lower lip of the oil filling opening as illustrated in Figure 2.

4. Replace the oil filler/dipstick cap.

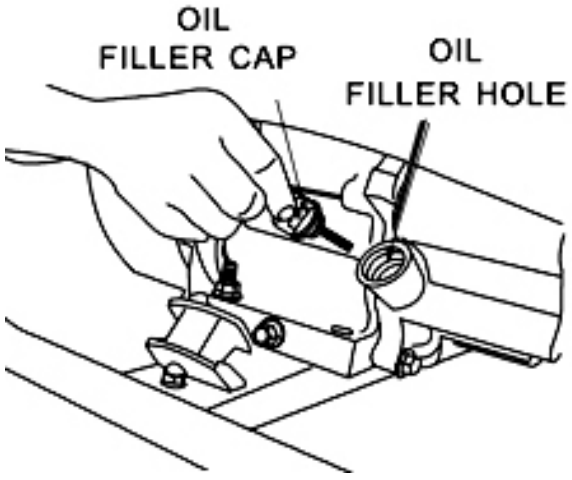


Figure 1 - Unscrewing the Oil Cap

Figure 2 - Adding Oil

Step 2 - Add Gasoline

⚠WARNING

Gasoline and gasoline fumes are highly flammable and explosive. Handling fuel can result in serious injury or burns.
• Do not fill the fuel tank near a heat, sparks or an open flame. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc.
• Do not overfill the fuel tank. Always check for fuel spills and immediately wipe them up. Spilled fuel is a fire hazard and causes environmental damage.

To add gasoline:
To ensure that this generator runs smoothly, use only FRESH, UNLEADED GASOLINE WITH AN OCTANE RATING OF 87 OR HIGHER. Unleaded gasoline produces fewer engine and spark plug deposits and extends the life of the exhaust system.

1. Confirm that this generator is on a level surface.

2. Unscrew fuel tank cap and set aside. (NOTE: The fuel tank cap may be tight and difficult to unscrew.)

3. Slowly add fresh, unleaded gasoline (with an octane rating 87 or higher) to the fuel tank. Be careful not to fill the fuel tank above the upper limit line. The fuel tank capacity for this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator is 4 gallons (15 L). The fuel gauge, located on the top of this generator, indicates how much gasoline is currently in the fuel tank. NOTE: Because gasoline can expand, do not fill the fuel tank to the very top.

4. Securely tighten the fuel tank cap and immediately wipe up any spilled gasoline with a dry cloth.

Model AC-G0002 Fuel Tank Capacity (gals /L)	4 / 15
Model AC-G0002 Fuel Type	Fresh, Unleaded Gasoline Octane Rating 87 or Higher

IMPORTANT:
• Use only UNLEADED gasoline with an octane rating of 87 or higher.
• Never use a mixture of oil and gasoline.
• Never use old and/or contaminated gasoline.
• Avoid getting dirt and/or water in the fuel tank.
• Gasoline can age in the fuel tank and make it difficult to start this generator. Never store this generator for extended time with gasoline in the fuel tank.

Step 3 - Ground the Generator

⚠WARNING

Failure to properly ground this generator can result in electrocution.

Ground this generator by tightening the grounding nut against a grounding wire as illustrated in Figure 3. A No. 12 AWG (American Wire Gauge) stranded copper wire is generally an acceptable grounding wire. The other end of this grounding wire should be connected to a copper or brass grounding rod that is driven into the earth.

Grounding codes can vary by location. Contact a local electrician for information on grounding regulations for your area.

Figure 3 - Attaching the Grounding Wire to this Generator

Subsequent Use of this Generator

For subsequent uses of this generator after the first use, certain steps still must be completed to prepare it for operation.

IMPORTANT: Be familiar with the procedures described in the previous section titled "Using the Generator for the First Time" of this manual. If not, review this section now.

Step 1 - Verify Oil Level

Even though this generator is equipped with an automatic shutoff to protect it from damage due to low oil, it is important to check the oil level in the engine crankcase before each use to ensure that there is sufficient quantity.

1. Verify that this generator is on a level surface.
2. Unscrew the oil filler/dipstick cap from the engine.
3. With a dry cloth, wipe the oil off of the dipstick that is located on the inside of the cap.
4. Fully insert the dipstick without screwing the filler/dipstick cap and then remove again. There should be oil on the dipstick. If there is no oil on the dipstick, or oil is visible only at the very end of the dipstick, add oil until the engine crankcase is filled. (See "Changing/Adding Oil" in the "Maintenance/Care" section of this manual).
5. Confirm that the oil filler/dipstick cap is properly screwed in place when finished verifying the oil level.

NOTE: The oil capacity for this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator is 20 fluid oz (0.6 L).

Model AC-G0002 Oil Capacity (fluid oz./L)	20 / 0.6
Model AC-G0002 Oil Type Recommended	SAE-30

Step 2 - Verify Gas Level

Before starting this generator, verify that there is sufficient gasoline in the fuel tank. The fuel gauge, located on the top of this generator, indicates the gas level currently in the fuel tank. If necessary, add fresh unleaded gasoline with an octane rating of 87 or higher according to "Step 2 - Add Gasoline" of the "Using this Generator for the First Time" section of this manual.

Model AC-G0002 Fuel Tank Capacity (gals /L)	4 / 15
Model AC-G0002 Fuel Type	Fresh, Unleaded Gasoline Octane Rating 87 or Higher

⚠ WARNING

Gasoline and gasoline fumes are highly flammable and explosive. Handling fuel can result in serious injury or burns.
• Do not fill the fuel tank near a heat, sparks or an open flame. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc.
• Always allow several minutes for the engine to cool before refueling.
• Do not overfill the fuel tank. Always check for fuel spills and immediately wipe them up. Spilled fuel is a fire hazard and causes environmental damage.

IMPORTANT:
• Use only fresh UNLEADED gasoline with an octane rating of 87 or higher.
• Never use old and/or contaminated gasoline.
• Never use a mixture of oil and gasoline.
• Avoid getting dirt and/or water in the fuel tank.
• Never store generator for extended time with gasoline in the fuel tank.

Step 3 - Ground the Generator

⚠ WARNING

Failure to properly ground this generator can result in electrocution.

Ground this generator by tightening the grounding nut against a grounding wire as previously illustrated in Figure 3. A generally acceptable grounding wire is a No. 12 AWG (American Wire Gauge) stranded copper wire. The other end of this grounding wire should be connected to a copper or brass grounding rod that is driven into the earth.

Grounding codes can vary by location. Contact a local electrician for information on grounding regulations for your area.

STARTING THE GENERATOR

STOP!

Before starting this generator, confirm that all the steps in the section titled, "Preparing the Generator for Use," of this manual have been correctly completed. If unsure about how to perform any of these steps, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time for customer service.

⚠ CAUTION

Disconnect all electrical loads from this generator before attempting to start.

To start this generator:

1. Confirm that there are no electrical devices connected to this generator. Connected devices may increase the difficulty in starting the engine.

2. Confirm that this generator is properly grounded. (See "Ground the Generator" section of this manual.)

3. Turn the fuel valve to the "on" position as shown in Figure 4.

4. Move the choke lever to the "closed" position as shown in Figure 5.

5. Set the engine switch to the "on" position.

6. Slowly pull on the recoil starter handle, shown in Figure 6, until a slight resistance is felt. Then pull briskly to start the engine. Gently return the cord into the generator to avoid damage to the starter or housing. Never allow the cord to snap back.

7. If the engine fails to start, repeat step 6. NOTE: After repeated attempts to start the engine, consult the troubleshooting guide before attempting again. If problems persist, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

8. Once the engine has started and runs for about a minute, move the choke lever approximately half way towards the "open" position. Wait an additional 30 seconds and then move the choke lever completely over to the "open" position.

9. Allow this generator to run for several minutes before connecting any electrical devices.

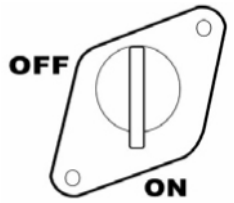


Figure 4 - Fuel Valve in the "on" position

Figure 5 - Choke Lever in the "closed" position. (Refer to the Generator Components chart to find the location of the Choke Lever.)

Figure 6 - Pull-cord for starting the engine.

USING THE GENERATOR

After the engine has been running for several minutes, electrical devices may be connected to this generator.

AC Usage

Electrical devices running on AC current may be connected according to their wattage requirements. The rated (running) and surge wattage for this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator is 3,000 and 3,500, respectively.

Model AC-G0002 Rated (Running) Wattage	3000
Model AC-G0002 Surge Wattage	3500

The *rated (running) wattage* corresponds to the maximum wattage a generator can output on a continuous basis.

The *surge wattage* corresponds to the maximum amount of power a generator can output for a short time. Many electrical devices, such as a refrigerator, require short bursts of extra power for starting and stopping fan motors, etc., in addition to their listed rated wattage. Motorized devices typically require more than their rated wattage for startup. The surge wattage ability of a generator allows for this extra power requirement.

The total running wattage requirement of the electrical devices connected to a generator should not exceed the rated wattage of the generator itself. To calculate the total wattage requirement of the electrical devices to be connected, look up the rated (running) wattage of each device and add these numbers together to find the total wattage that all of the devices together will draw from the generator. If the total wattage of the selected devices exceeds the rated wattage of the generator, DO NOT connect all of the devices. Select a combination of the electrical devices that will have a total wattage less than or equal to the rated wattage for the generator, i.e., no more than 3000 for this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator.

⚠ CAUTION

This generator can run at its surge wattage capacity for only a short time. Connect electrical devices requiring a rated (running) wattage equal to or less than the rated wattage of this generator. Never connect devices requiring a rated wattage equal to the surge wattage of a generator.

A device's rated (running) wattage should be listed somewhere on the device itself and/or in its manual. If the wattage specification for a device is not available, the wattage can be calculated by multiplying the Voltage requirement (120 or 240) by the Amperage drawn.

Watts = Volts x Amperes

Or, the wattage required by a device can be estimated by using the following chart (see Figure 7). The chart provides only estimates and it is better to know the exact wattage of each electrical device to be powered by this generator.

Electrical Device	Rated (Running) Watts	Additional Surge Watts
air compressor (1 HP)	1500	3000
air compressor (1 - 1/2 HP)	2500	2500
airless sprayer (1/3 HP)	600	1200
box fan	300	600
clock radio AM/FM	300	0
coffee maker	1500	0
computer w/17 inch monitor	800	0
deep freezer	500	500
electric drill (1/2 HP)	1000	1000
DVD/CD player or VCR	100	0
furnace fan blower (1/2 HP)	800	1300
garage door opener (1/2 HP)	480	520
hot plate	2500	0
light bulb (75 watt)	75	0
microwave oven (1000 watt)	1000	0
quartz halogen work light	1000	0
refrigerator/freezer (18 Cu. Ft.)	800	1600
saw - circular (7 1/4 inch)	1500	1500
saw - miter (10 inch)	1800	1800
saw - radial arm	2000	2000
saw - reciprocating	960	1040
saw - table/radial (10 inch)	2000	2000
security system	180	0
stereo receiver	450	0
electric stove - single element	1500	0
sump pump	800	1200
table planer (6 inch)	1800	1800
television (27 inch color)	500	0
electric water heater (40 gallon)	4000	0
well water pump (1/3 HP)	1000	2000
window air conditioner (10000 BTU)	1200	1800
window fan	300	600

Figure 7 - Estimated wattage requirements for common electrical devices.

Connect electrical devices to this generator according to the following procedure:

1. Allow the engine to run for several minutes after it has been started.

2. Confirm that the electrical device is switched off prior to plugging it into this generator.

⚠ CAUTION

Connect only electrical devices that are in good working order. Faulty devices or power cords present the risk of electrical shock. Immediately turn off and disconnect any device that commences to operate abnormally, sluggish or abruptly stops. Determine if the problem was the device or the rated load capacity of this generator has been exceeded.

NOTE: Plug appliances into the correct outlet. Connect standard 120 Volt, single phase, 60 Hz loads to the 120 Volt outlet. Connect 240/120Volt, single phase, 60Hz loads with a NEMA L14-30 plug only to the 240/120 Volt outlet. See Figure 8 for an illustration of these outlets.

⚠ CAUTION

Even though this ACDelco AC-G0002 Portable Generator has an overall rated wattage of 3000, do not attempt to draw more than 3400 Watts (20 A) from any ONE of the 120 Volt outlets. Draws higher than 3400 Watts (20 A) will damage this generator and void the warranty.

NOTE: While this generator is running, power is available from either the standard 120 Volt outlets or the 240/120 Volt NEMA outlet. Both 120 Volts and 240 Volts can be simultaneously drawn from this generator.

3. Turn on the connected electrical devices beginning with the device with the highest rated wattage requirement and then each additional device with the next lower rated wattage requirement.

⚠ CAUTION

Do not connect 50Hz or 3-phase loads to this generator.

Figure 8 - Outlets Available on this Generator, from left to right, 12V DC, 120V AC, and 240/120 AC (NEMA L14-30 plug).

SOME NOTES ABOUT POWER CORDS

Long or thin cords can require more wattage from a generator to power an electrical device. Figure 9 shows the recommended cords according to the power requirement of the electrical device. When using cords that exceed these specifications, allow for the electrical device to have a slightly higher rated wattage requirement.

Device Requirements			Max. Cord Length (ft) by Wire Gauge				
Amps	Watts (120V)	Watts (240V)	#8 wire	#10 wire	#12 wire	#14 wire	#16 wire
2.5	300	600	NR	1000	600	375	250
5	600	1200	NR	500	300	200	125
7.5	900	1800	NR	350	200	125	100
10	1200	2400	NR	250	150	100	50
15	1800	3600	NR	150	100	65	NR
20	2400	4800	175	125	75	50	NR
25	3000	6000	150	100	60	NR	NR
30	3600	7200	125	65	NR	NR	NR
40	4800	9600	90	NR	NR	NR	NR

NR = Not Recommended.

Figure 9 - Maximum Extension Cord Lengths by Power Requirement

DC Usage

⚠ CAUTION

The DC outlet is only for recharging 12 Volt automotive-type batteries. Do not connect any other device to this outlet.

⚠ CAUTION

Use this generator only for recharging 12 Volt batteries. NEVER attempt to jumpstart a car with this generator.

⚠ DANGER

Failing to use the correct procedure can cause a battery to explode, seriously injuring anyone nearby. Keep heat, sparks, flame and smoking materials away from the battery.

To connect 12 Volt batteries to the DC outlet:

1. Connect one charging wire to the positive terminal of the battery and the other charging wire to the negative terminal of the battery.
2. Connect the free end of the positive wire to the positive side of the outlet on this generator.
3. Start this generator.
4. Carefully connect the free end of the negative wire to the negative side of the outlet on this generator.
5. When disconnecting, always disconnect the wires from this generator first to avoid a spark.

⚠ DANGER

Storage batteries emit highly explosive hydrogen gas when charged.
Batteries also contain acid, which can cause severe chemical burns.

- Do not allow open flames or cigarettes nearby for several minutes after charging a battery.
- Always wear protective goggles and rubber gloves when charging a battery.
    - If battery acid gets on the skin, flush with water.
    - If battery acid gets in the eyes, flush with water and immediately call a physician.
    - If battery acid is swallowed, drink large quantities of milk and immediately call a physician.

STOPPING THE GENERATOR

To stop this generator:

1. Turn off all connected electrical devices and then unplug them.
2. Switch the circuit breaker to the “off” position.
3. Allow this generator to run for several more minutes with no electrical devices connected to help stabilize the temperature of this generator.
4. Set the engine switch to the “off” position.
5. Turn the fuel valve to the “off” position.

⚠ WARNING

Allow this generator to cool down before touching areas that become hot during operation.

⚠ CAUTION

Allowing gasoline to sit in this generator's fuel tank for extended time without use can increase the difficulty in starting this generator in the future. Never store this generator for extended time with gasoline in the fuel tank.

MAINTENANCE/CARE

Proper routine maintenance of this generator is essential for safe, economical, and trouble-free operation. It will help prolong the life of this generator as well as help reduce air pollution. Perform maintenance checks and procedures according to the schedule in Figure 10.

STOP!

If you have questions about any maintenance procedures described in this manual, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

⚠ CAUTION

Never perform maintenance procedures while this generator is running. Allow this generator to cool before commencing any maintenance procedures. Keep heat, sparks and flame away.

⚠ WARNING

Improper maintenance and/or failure to correct any problems prior to operating this generator can cause a malfunction which could cause death or serious injury. Always follow the inspection and maintenance recommendations and schedules in this manual.

Recommended Maintenance Schedule

		Each Use	Every Month or Each 20 Hrs	Every 3 Months or Each 50 Hrs	Every 6 Months or Each 100 Hrs	Every Year or Each 300 Hrs
Engine Oil	Check Level	X				
	Replace		X			
Air Filter	Check	X				
	Clean			X		
Fuel Filler Cap	Clean				X	
Spark Plug	Check/Clean				X	
Fuel Tank	Verify Gas Level	X				
	Clean					X

Figure 10 - Recommended maintenance schedule

Cleaning the Generator

Always try to use this generator in a cool dry place. If this generator becomes dirty, the exterior can be cleaned with a damp cloth, soft brush, vacuum and/or pressurized air.

Never clean this generator with a bucket of water and/or a hose as water can get inside and cause a short circuit or corrosion.

Never use gasoline to clean parts of this generator.

Checking the Oil Level

Even though this generator is equipped with an automatic shutoff to protect it from damage due to low oil, it is important to check the oil level in the engine crankcase before each use to ensure that there is a sufficient quantity.

To check the oil level:

1. Verify that this generator is shut down and on a level surface.
2. Unscrew the oil filler/dipstick cap from the engine as illustrated in Figure 11.
3. With a dry cloth, wipe the oil off of the dipstick that is located on the inside of the cap.
4. Insert the dipstick as if replacing the cap and then remove again. There should be oil on the dipstick. If there is no oil on the dipstick, or oil is visible only at the very end of the dipstick, add oil until the engine crankcase is filled (see “Changing/Adding Oil” in this section of this manual).
5. Confirm that the oil filler/dipstick cap is properly in place when finished verifying the oil level.

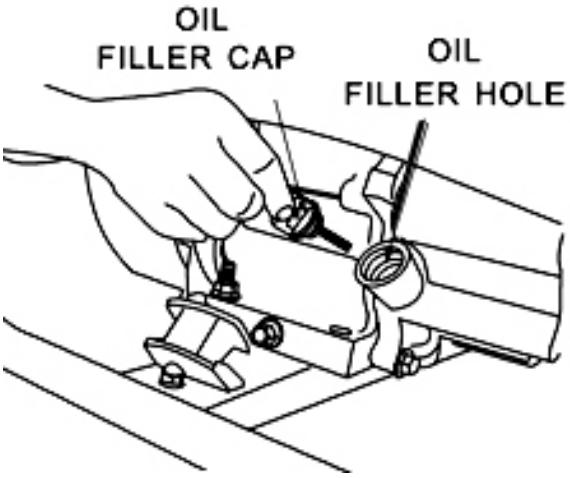


Figure 11 - Checking the Oil

Changing/Adding Oil

The oil level in this generator should be checked before each use. (See Figure 10.) When the oil level is low, add oil until the level is sufficient to operate this generator.

The oil capacity for this ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator engine is 20 fluid oz. (0.6 L).

To drain the oil from this generator:
It is necessary to drain the oil from the crankcase only if it has become contaminated with water and/or dirt.

1. Place a bucket underneath this generator to catch oil as it drains.
2. Using a 10 mm hex wrench, unscrew the oil drain plug located on the crankcase underneath the oil filler/dipstick cap as illustrated in Figure 12.
3. Allow all the oil to drain from this generator.
4. Replace the oil drain plug and tighten with a 10 mm hex wrench.

NOTE: Never dispose of used motor oil in the trash, down a drain or on the ground. Put oil in a sealed container and contact your local recycling center or auto garage to arrange oil disposal.

To add oil to the engine crankcase:

1. Confirm that this generator is on a level surface.

2. Unscrew the oil filler/dipstick cap from the engine as illustrated in Figure 11 above.

3. Using a funnel, add high detergent motor oil to fill the engine crankcase to the correct quantity. SAE-30 oil is recommended for general use. When the engine crankcase is full, the oil level should reach the lower lip of the oil filling opening as shown in Figure 13.

Model AC-G0002 Oil Capacity (fluid oz./L)	20 / 0.6
Model AC-G0002 Oil Type Recommended	SAE-30

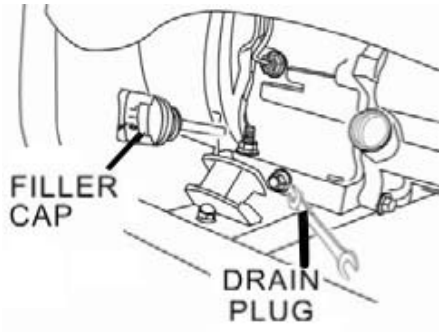


Figure 12 - Draining Oil

Figure 13 - Adding Oil

Air Filter Maintenance

Routine maintenance of the air filter helps maintain proper airflow to the carburetor.
Occasionally verify that the air filter is free of excessive dirt. The air filter will require more frequent cleaning when operating this generator in extremely dusty areas.

1. Unhinge the clasps at the top and bottom of the air filter cover as shown in Figure 14.

2. Remove the sponge-like elements from the casing.

3. Wipe the dirt from inside the empty air filter casing.

4. Wash the sponge-like elements in household detergent and warm water. Do not use gasoline or a flammable solvent.

5. Allow the sponge-like elements to dry thoroughly.

6. Soak the dry sponge-like elements in engine oil. Squeeze out any excess oil. The engine will smoke during initial startup if too much oil is left in the air filter.

7. Replace the sponge-like elements in the air filter casing (the fine element first) and replace the cover.

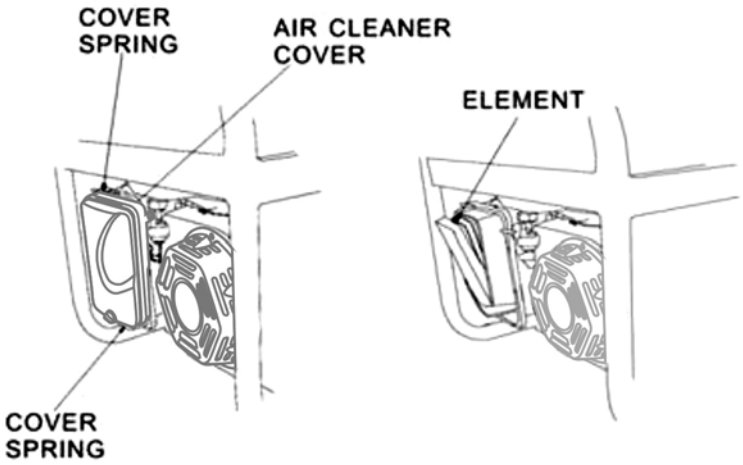


Figure 14 - Removing the Air Filter Casing.

Fuel Filter Cup Cleaning

The fuel filter cup is a small well underneath the fuel valve which helps trap dirt and water that may be in the fuel tank before entering the engine.

To clean the fuel filter cup:

1. Turn the fuel valve to the “off” position.
2. Unscrew the fuel filter cup from the fuel valve using a wrench. (Turn the valve toward you to unscrew as illustrated in Figure 15.)
3. Using a rag or brush, clean the cup of all sediment.
4. Reinstall the fuel filter cup.

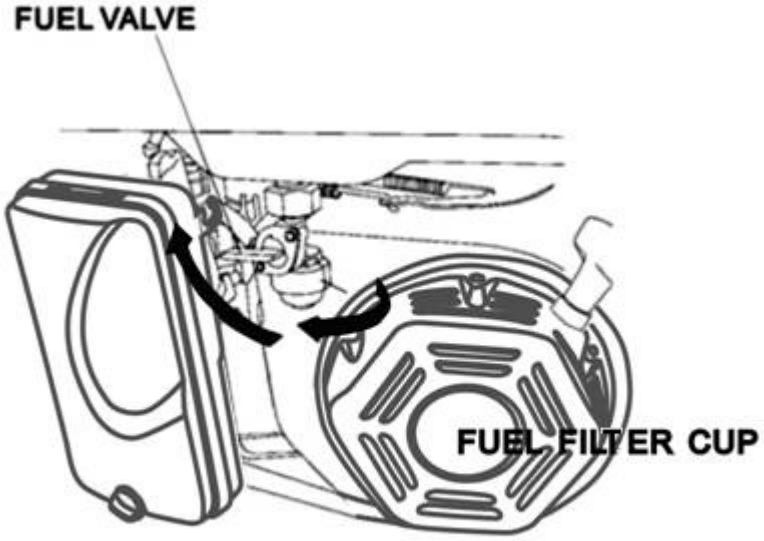


Figure 15 - Removing the Fuel Filter Cup

Spark Plug Maintenance

The spark plug is essential for proper engine operation. The spark plug should be intact, free of deposits, and properly gapped. A bad or incorrectly installed spark plug can cause engine damage.

Model AC-G0002 Spark Plug Type	F6TC
Model AC-G0002 Spark Plug Gap (in/mm)	0.028-0.031/0.7-0.8

To inspect the spark plug:

1. Remove the spark plug by pulling on the spark plug cap.

2. Unscrew the spark plug from this generator by using the included spark plug wrench as illustrated in Figure 16.

3. Visually inspect the spark plug. If it is cracked and/or chipped, discard and install a new spark plug. A F6TC spark plug, such as NGK BPR5ES, is recommended.

4. Measure the spark plug electrode gap with a gauge. The gap should be 0.028-0.031in (0.7-0.8mm). (See Figure 17.)

5. If re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base and then re-gap the spark plug.

6. Screw the spark plug back into place on this generator by using the included spark plug wrench.

7. Replace the spark plug cap.

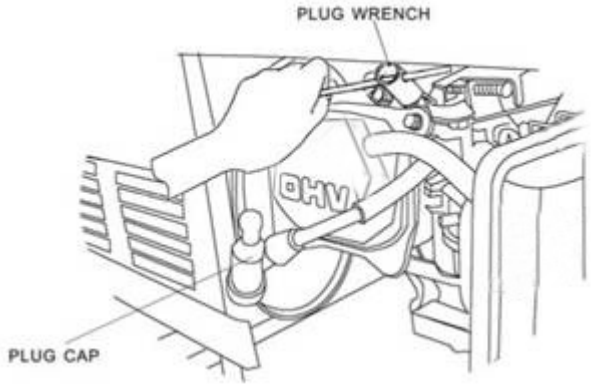


Figure 16 - Removing the Spark Plug

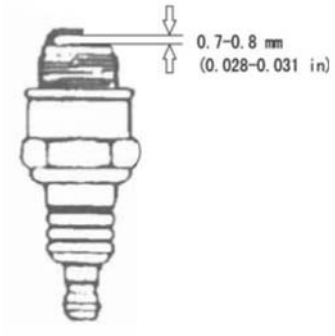


Figure 17 - Measuring the Spark Plug Gap

Emptying the Fuel Tank

To store this generator for extended time, drain the gasoline from the fuel tank.
To drain gasoline from this generator:

1. Turn the fuel valve to the “off” position.

2. Remove the fuel filter cup. (See “Fuel Filter Cup Cleaning” earlier in this section.)

3. Empty the fuel filter cup of any fuel.

4. Place a receptacle underneath this generator to catch gasoline as it drains.

5. Turn the fuel valve to the “on” position and allow all gasoline to drain.

6. Turn the fuel valve to the “off” position.

7. Replace the fuel filter cup.

8. Store the drained gasoline in a suitable place.

⚠ CAUTION

Do not store gasoline for more than 3 months.

STORAGE/TRANSPORT PROCEDURES

⚠ CAUTION

Never place any type of storage cover on this generator while it is still hot.

When transporting or storing this generator for extended time:

- Allow generator to fully cool before moving it. A hot engine and exhaust system can burn you and ignite some materials.
- Empty the fuel tank. (See "Emptying the Fuel Tank" in the "Maintenance/Care" section.)
- Turn the fuel valve to the "off" position.
- Disconnect the spark plug. (See Figure 16, Removing the spark plug.)
- Do not obstruct any ventilation openings.
- Do not drop or strike this generator while moving it.
- Store this generator in a cool dry area, free of excessive dust.

Storage Time	Recommended Storage Procedure (which will help prevent difficult starts)
Less than 1 month	No storage procedure required.
1 to 2 months	Fill with fresh gasoline and add gasoline conditioner
2 months to 1 year	Empty the fuel tank. (See "Emptying the Fuel Tank" in the "Maintenance/Care" section.)
1 year or more	Empty the fuel tank. (See "Emptying the Fuel Tank" in the "Maintenance/Care" section.) Disconnect the spark plug. (See Figure 16, Removing the spark plug.)

TROUBLESHOOTING

IMPORTANT: If trouble persists, call our customer help line at 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

Symptom	Cause	Solution
Engine will not start.	Engine switch is set to "off."	Set engine switch to "on."
	Fuel valve is turned to "closed."	Turn fuel valve to "open."
	Choke is open.	Close the choke.
	Engine is out of gasoline.	Add gasoline.
	Engine is filled with contaminated and/or old gasoline.	Drain gasoline from the engine and add new gasoline.
	Spark plug is dirty.	Clean spark plug.
	Spark plug is broken.	Replace spark plug.
	Generator is not on level surface.	Move generator to a level surface to prevent triggering the low oil shutdown.
	Oil is low.	Add or replace oil.
Engine runs but there is no electrical output.	Circuit breaker is off.	Flip circuit breaker to "on."
	Reset button is "off."	Push reset button to "on."
	Bad connecting wires/cables.	Try a different extension cord.
	Bad electrical device connected to generator.	Disconnect device, try connecting another device.
Generator runs but does not support all connected electrical devices.	Generator is overloaded.	Reduce draw on generator to within this generator's rated wattage by reducing number of connected electrical devices.
	Short in one of the connected devices.	Disconnect any faulty or short-circuited electrical loads.
	Air filter is dirty.	Clean or replace air filter.

SPECIFICATIONS

ACDelco Model AC-G0002 3500 Surge Watts / 3000 Running Watts Portable Generator

Generator

Type	Brush, Revolving Magnetic Field, Self Exciting, 2-Pole, Single Phase

AC Output

Rated Wattage (W)	3000
Surge Wattage (W)	3500
Rated Voltage (V)	120/240
Rated Amperage	12.5A+12.5A at 120 V 12.5 A at 240 V
Rated Frequency (Hz)	60
Phase	Single

DC Output

Voltage (V)	12
Circuit Breaker Amperage (A)	8.3

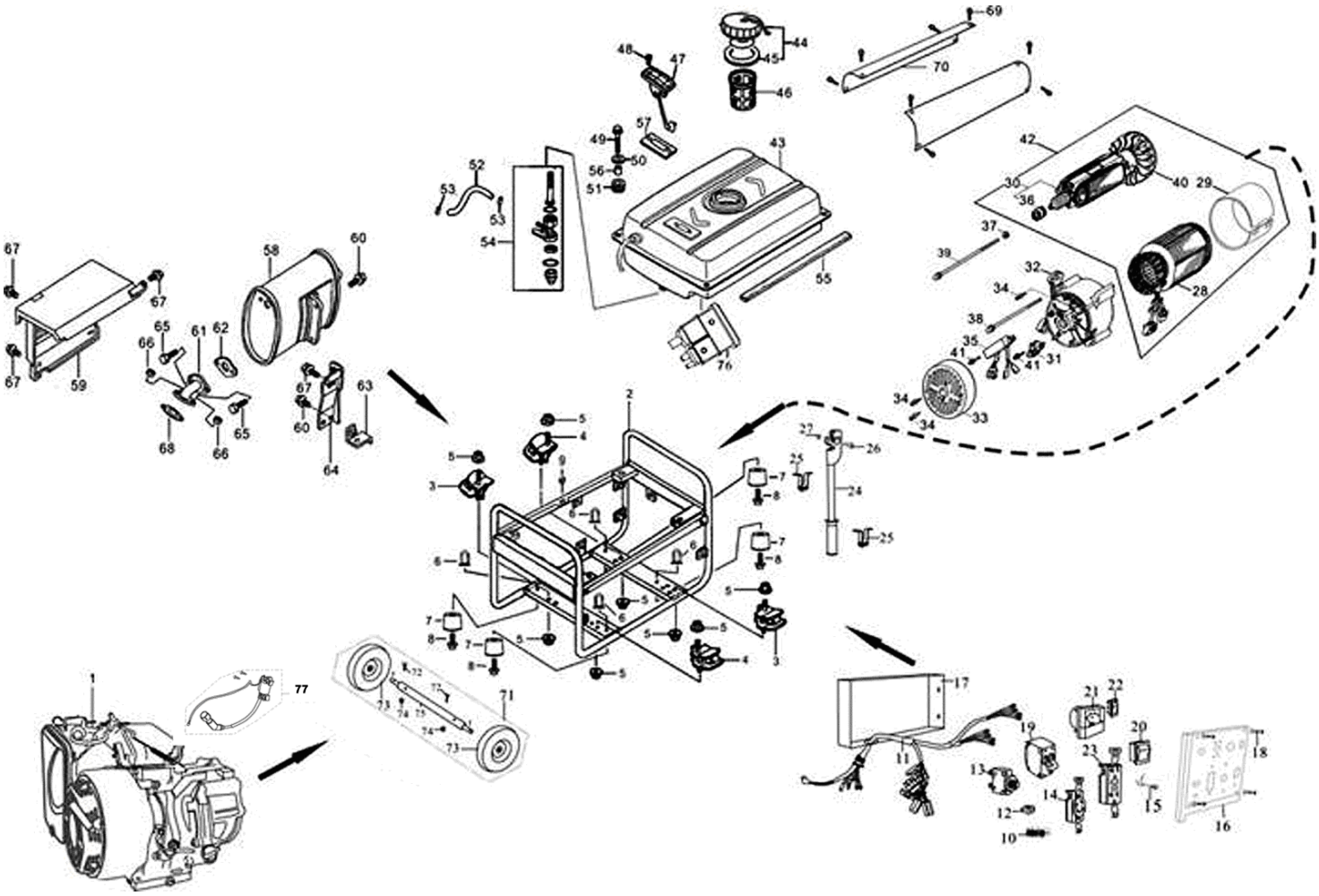
Dimensions and Weight

Dimensions (in.)	23.2 Length, 17.2 Width, 17.2 Height
Gross Weight (lbs)	115
Net Weight (lbs)	106

Engine

Approvals	CARB/EPA/MTL/CTL
Engine Model (HP)	6.5
Engine Type	4-stroke OHV single cylinder with forced air cooling system.
Ignition System	non-contact transistor (T.C.I.)
Starting System	Recoil
Displacement (cm3)	196
Max Output (hp/rpm)	6.5/3600
Fuel Tank Capacity (Fresh, Unleaded gasoline, 87 or higher octane) (US gal./L)	4 / 15
Continuous Operating Hours	9 @ 50% Load
Oil Capacity (SAE-30) (fl oz./Qts/L)	20 / 0.63 / 0.6
Run Time on 50% Load (hours)	9
Noise Rating (at 7 m, 0% load) (dB)	<78

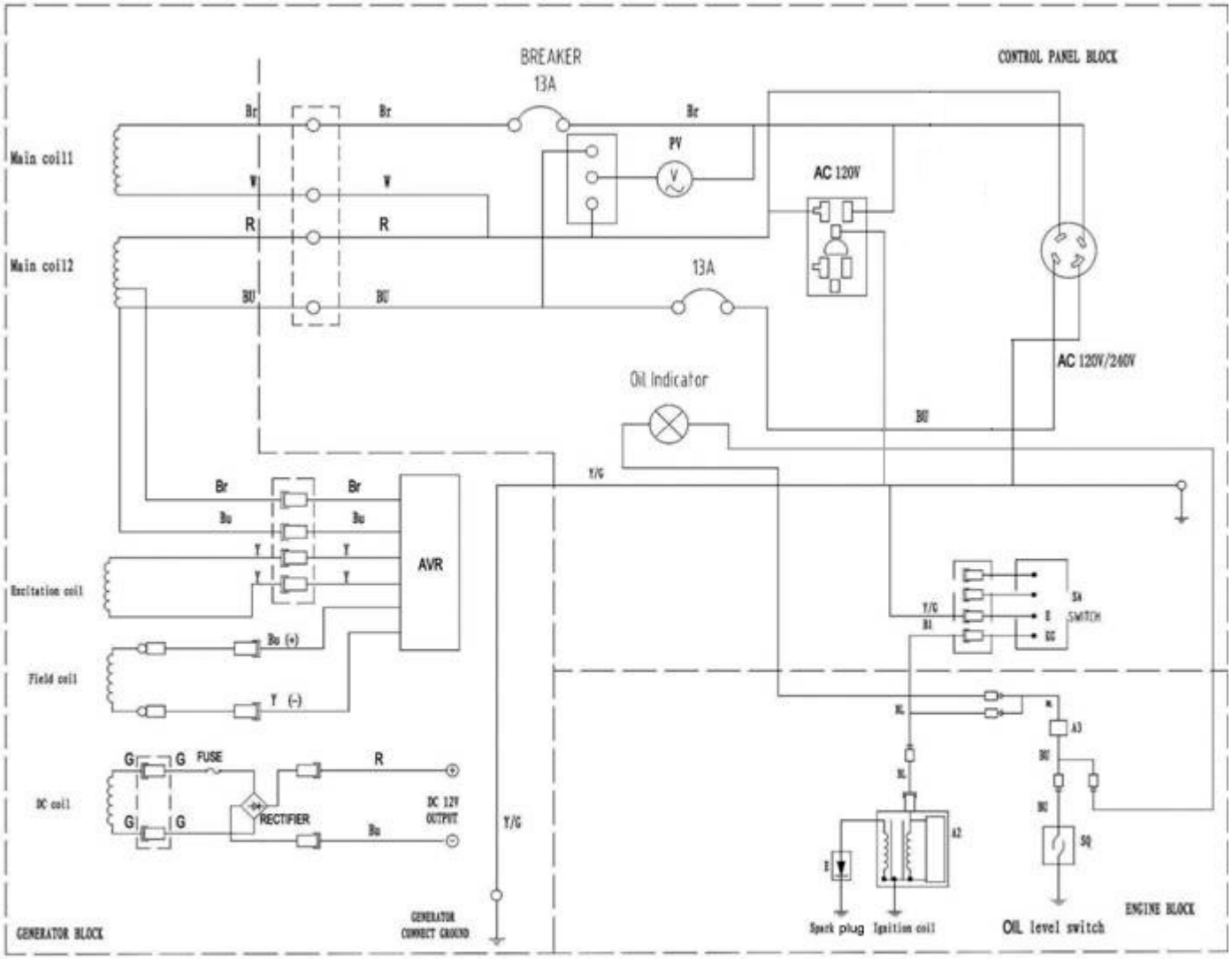
Model AC-G0002 3500 EXPLODED VIEW AND PARTS LIST



Model AC-G0002 3500 PARTS LIST

Item	Part	Qty	Description	Item	Part	Qty	Description
1	168F-2BV		Gasoline engine	39	31933	1	Bolt 8 mm × 205 mm
2	41100	1	Frame complete	40	31141/2GF-3	1	Generator fan
3	41310/2GF-3	2	Bottom rubber mount A	41	31996/2GF-3	3	Bolt 5 mm × 14 mm
4	41320/2GF-3	2	Bottom rubber mount B	42	30100	1	Stator & rotor Assembly
5	GB6177-86	8	Flange nut 8 mm	43	16610/2GF-3	1	Fuel tank
6	GB802-88	4	Nut 6 mm	44	16500/2GF-3	1	Fuel filler cap complete
7	41350/2GF-3	4	Cushion, frame	45	16521/2GF-3	1	Packing ring
8	GB5787-86	4	Bolt 6 mm × 12 mm	46	16916/2GF-3	1	Fuel filler
9	41116	1	Rubber pad	47	37820/2GF-3	1	Fuel sensor
10	32520	1	Ground connector	48	GB819-85	2	Screw 5 mm × 10 mm
11	32100	1	Wire harness Assembly	49	GB5787-86	4	Flange bolt 6 mm × 22 mm
12	35550	1	Receptacle (DC)	50	16821/2GF-3	4	Washer
13	31750	1	Current protector 8A	51	16811/2GF-3	4	Cushion
14	35510	1	Receptacle (4 holes)	52	16931/2GF-3	1	Outlet pipe (φ9×φ4.5×130)
15	37880	1	Low oil indicator	53	16937/168F	2	Tube clip
16	37300	1	Control panel Assembly	54	16930/2GF-3	1	Fuel cock
17	37321	1	Control panel case	55	16812/2GF-3	1	Stripe, fuel tank
18	GB5787-86	4	Flange bolt 6 mm × 12 mm	56	16824/2GF-3	4	Fitting brush, fuel tank
19	31710	1	Circuit protector	57	37825/2GF-3	1	Gasket, fuel sensor
20	35410	1	Ignition switch	58	18300/168F-BV	1	Muffler
21	37420	1	Voltmeter	59	18611/2GF-3	1	Muffler guard
22	31820	1	Voltage selector switch	60	GB5787-86	3	Flange bolt 8 mm × 16 mm
23	35540	1	Receptacle (GFCI)	61	18110/168F-BV	1	Exhaust pipe complete
24	47160	1	Handle unit	62	18221/168F-BV	1	Muffler gasket
25	41136	2	Feet	63	18720/2GF-3	1	Supporting plate
26	GB5787-86	2	Bolt 8 mm x 40 mm	64	18710/2GF-3	1	Muffler stay
27	GB6187-86	1	Nut 8 mm	65	GB5787-86	2	Bolt 8 mm × 25 mm
28	31200	1	Stator Assembly	66	GB6187-86	2	Nut 8 mm
29	31936	1	Stator cover	67	GB5787-86	6	Flange bolt 6 mm × 12 mm
30	31100	1	Rotor Assembly	68	12255/168F	1	Exhaust pipe gasket
31	31370	1	Brush Assembly	69	GB5787-86	8	Bolt 6 mm × 12 mm
32	31411/2GF-3	1	Generator stay	70	37330	2	Curved panel
33	31938/2GF-3	1	Generator end cover	71	42000	1	Wheel kit Assembly
34	31995/2GF-3	3	Bolt 5 mm×12 mm	72	GB5787-86	2	Bolt 8 mm × 16 mm
35	31600	1	Voltage regulator	73	42150	2	Wheel kit
36	GB276-89/2GF-3	1	Bearing 6202-2RS	74	GB6187-86	1	Nut 8 mm
37	31134/2GF-3	1	Plain washer	75	42130	2	Wheel axel
38	31931	4	Flange bolt 6 mm × 150 mm	76	16650	1	Carbon Canister
				77	34310/168F	1	Spark Plug Cap

MODEL AC-G0002 3500 SURGE WATTS / 3000 RUNNING WATTS PORTABLE GENERATOR WIRING DIAGRAM



SWITCH

	KG	E
OFF	⊖	⊖
ON		
START		

BL	Black	R	red
Y	yellow	W	White
BU	blue	Br	Brown
G	green		

NOTES:

WARRANTY

LIMITED WARRANTY for ACDelco Generators from New Buffalo Corporation.

Remember to save your receipt and to accurately fill out and mail your product registration card. You must provide proof of purchase for all warranty work.

ACDelco generators are warranted to be free from defects in materials and workmanship for a period of one (1) year from date of original purchase. Generators used for Commercial or Rental use have a warranty period of 90 days from date of original purchase. Keep purchase receipt and mail in the product registration card for proof of purchase.

ACDelco by New Buffalo Corporation will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the one (1) year warranty period. Warranty repairs or replacements will be made without charge for parts or labor. Parts replaced during warranty repairs will be considered as part of the original product and will have the same warranty period as the original product.

To exercise this warranty, DO NOT RETURN TO RETAILER. Instead, call the toll free Customer Service number: 1-866-460-9436 and you will be instructed on where to take the engine for warranty service. Take this generator and proof of purchase (your receipt) to the repair facility recommended by the Customer Service Representative.

The warranty does not extend to generators damaged or affected by fuel contamination, accidents, neglect, misuse, unauthorized alterations, use in an application for which the product was not designed and any other modifications or abuse.

ACDelco by New Buffalo Corporation is not liable for any indirect, incidental or consequential damages from the sale or use of this product. Any implied warranties are limited to one (1) year as stated in this written limited warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages. Some states do not allow limitation on the length of an implied warranty. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

REGISTRATION

Return this product registration form, along with a copy of the sales receipt and UPC bar code to:
NEW BUFFALO CORPORATION, 1220 NORTH PRICE ROAD, ST. LOUIS, MO 63132

Name:_____

Address: _____

City: _____State: _____Zip: _____

Phone: _____E-mail: _____

Date Purchased: _____Model #: _____

Store Where Purchased: _____

Store Address: _____

Receipt or Transaction #: _____Serial #: _____

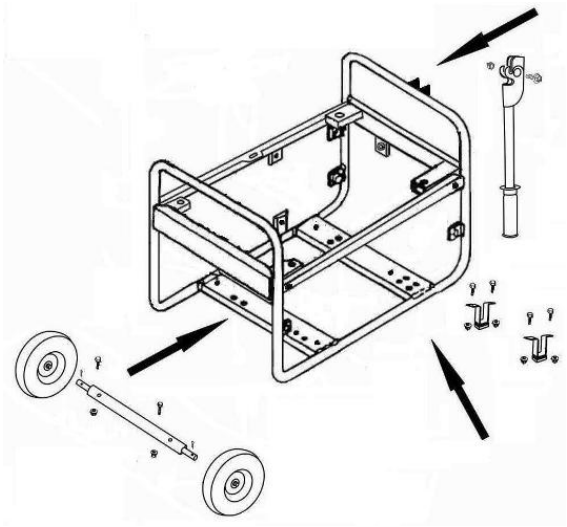
This registration form must be returned to New Buffalo Corporation within 10 days of purchase. This registration card is the only information New Buffalo Corporation will have to notify you of any information regarding this product.
This information is for the sole purpose of product registration and will not be sold or used for any other purpose.

YOU MAY ALSO REGISTER THIS GENERATOR ONLINE AT **www.buffalotools.com**.

ACDelco c/o
New Buffalo Corporation
1220 North Price Road
St. Louis MO 63132
Phone: 866-460-9436
www.buffalotools.com

PORTABILITY KIT INSTALLATION

The manufacturer recommends when using your ACDelco generator for recreational or utility functions that you properly install the Portability Kit included with your generator purchase. All ACDelco generator models include a Portability Kit for optional installation. Portability Kits are not required for ACDelco generators to properly operate.



Model # AC-G0002
3500 Watt Generator

Step 1

1. Install wheel axle, insert bolts (2) 8mm x 16mm through axle and generator's frame and tighten 8mm nut (2) onto bolt.
2. Slip wheels (2) over the axle on both ends, insert cotter pins (2) through axle and spread the pins to hold wheels in place.

Step 2

1. Install stabilizer feet (2), insert bolts (4) 6mm x 12mm through feet and generator frame and tighten 6mm nut (2) onto bolt.

Step 3

1. Insert handle unit into the center of the stationary bracket located on the top center of the frame, slide bolt 8mm x 40mm through both bracket and handle unit, tighten 8mm nut onto bolt.

(AC-G0002-0908)